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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/501,116	07/12/2004	Andrzej Szajdecki	1387-9 PCT/US	5692
23869 7590 06/18/2007 HOFFMANN & BARON, LLP 6900 JERICHO TURNPIKE SYOSSET, NY 11791			EXAMINER ALSIP, MICHAEL	
			ART UNIT 2186	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/501,116

Applicant(s)

SZAJDECKI ET AL.

Examiner

Michael Alsip

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 July 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 7/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Specification

1. The disclosure is objected to because of the following informalities: In the abstract and throughout the specification blocks (2,3,4) are of a predetermined size and block (3) is further referred to as a larger and smaller block with higher and lower integration levels respectively. It is unclear to the examiner how block (3) can be both types of blocks at the same time. Based upon the drawings the examiner believes that block (3) is a smaller block as block (2) and not a larger block like block (4). Appropriate correction is required.
2. **Claims 1-20** are objected to because of the following informalities: The claims have the same inconsistencies, with reference to block (3), as the disclosure objected to above. Appropriate correction is required.
3. **Claims 3, 9, 13, and 19** are objected to because of the following informalities: These claims state the limitation "bit", but from reading the disclosure the examiner believes this term should be "byte". Appropriate correction is required.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
5. Claims 11-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

6. **Claim 11** recites the limitation "the partition" in line 5. There is insufficient antecedent basis for this limitation in the claim. The examiner is taking this term to mean until the partitioning process covers the entire area of the device for storing data.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. **Claims 1-20** rejected under 35 U.S.C. 103(a) as being unpatentable over "A Description of the DOS File System" by Philip J. Erdelsky, Henceforth referred to as Erdelsky.

10. Consider **claims 1 and 11**, Erdelsky discloses a device for data storing with logically separated areas comprising blocks (2, 3, 4) of a predetermined size created from a definite number of logically separated smallest areas (1), wherein larger blocks (3, 4) with a higher integration level are definite multiples of smaller blocks (2, 3) with a

lower integration level, and the smaller blocks (2, 3) compose the larger blocks (3, 4) larger by one integration level (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, and pg.'s 5-6 section 8: file allocation tables, where the logically separated smallest areas are considered sectors, The definite multiples of smaller blocks are considered clusters and larger blocks are considered to be partitions), and integration of the logically separated smallest areas (1) is performed in recurrent manner till the integration covers the whole area of the device for data storing (pg. 1 section 2: Block Devices and pg. 3 section 5: Disk Partitions). In Erdelsky, when a partition is created, the physical sectors are organized into logical sector numbers and cover all the area allocated for that partition and Erdelsky also discloses using multiple partitions if there is still room on the storage device for another partition or if more area is needed. Erdelsky does not explicitly disclose creating partitions and therefore integrating more sectors into clusters and partitions until all the space on the storage device is consumed. The examiner is taking official notice to the fact that utilizing all the disk space available to the user is well known to one of ordinary skill in the art.

It would have been obvious to one of ordinary skill in the art at the time of the invention to continue integrating sectors into clusters and partitions until the whole area of the device for data storing is covered in the system of Erdelsky, because utilizing the whole disk space is an efficient way of getting the most use out of the space available to the user and disk drives of varying capacities are designed to have their whole disk space utilized.

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11. Consider **claims 2 and 12**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein a block (3, 4) with greater, by one, integration level has a memory size equal to a multiple of a size of blocks (2, 3) with smaller, by one, integration level, and the amount of information that is stored in the logically separated smallest area (1) (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, and pg.'s 5-6 section 8: file allocation tables, where the size of a partition is equal to a multiple of the size of one cluster).

12. Consider **claims 3 and 13**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein a number of the logically separated smallest areas (1) in a block (2) of the minimal integration level is equal a number of bits that can be stored in the logically separated smallest area (1) (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, and pg.'s 5-6 section 8: file allocation tables, where Erdelsky discloses that sector sizes and commonly 128, 256, 512, or 1024 bytes and that the size of a cluster depends on the size of the partition, but does not explicitly state the sectors per cluster at different size partitions). The examiner is taking official notice to the fact that the number of sectors per cluster in a FAT file system is notoriously well-known and that partition sizes of 2048-4096MB, 4096-8192MB, and 8192-16384MB have 128, 256, and 512 sectors per cluster, respectively. To further illustrate the fact that this is notoriously well-known, the examiner cites I-50970126 – Windows NT Default Cluster Size for FAT and NTFS: bottom paragraph and graph on page 1 and top of page two.

13. Consider **claims 4 and 14**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein blocks (2, 3, 4) of predetermined size have at least three states and

information concerning their state is stored within their area or within the area of blocks with greater, by one, integration level (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, section 7: Reserved Sectors and pg.'s 5-6 section 8: file allocation tables, where Erdelsky discloses information concerning the state of the clusters as unassigned and available, assigned, whether the cluster contains a bad sector, and whether the cluster is the last cluster to a file, where this information is stored in the partition).

14. Consider **claims 5 and 15**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein blocks (2, 3, 4) of predetermined size may be free, busy or fragmented (section 8: file allocation tables, where a cluster may be unassigned and available, assigned, or have a bad sector, where having a bad sector would mean that a file stored in that cluster will not be written in contiguous blocks, therefore being fragmented).

15. Consider **claims 6 and 16**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein the logically separated smallest areas (1) have at least two states (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, section 7: Reserved Sectors and pg.'s 5-6 section 8: file allocation tables, where each cluster consists of sectors, therefore a cluster being assigned or unassigned means sectors are assigned or unassigned).

16. Consider **claims 7 and 17**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein the logically separated smallest areas (1) are either free or busy (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, section 7: Reserved Sectors

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and pg.'s 5-6 section 8: file allocation tables, where each cluster consists of sectors, therefore a cluster being assigned or unassigned means sectors are assigned or unassigned).

17. Consider **claims 8 and 18**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein the logically separated smallest areas (1) are the smallest areas of memory, which cannot be subdivided, and their multiplication, and their size depends upon the device for storing data (pg. 1 section 2: Block Devices, where the sector is the smallest separated logical area and the size of the sector depends on the RAM disk or hard disk format).

18. Consider **claims 9 and 19**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein the logically separated smallest areas (1) have the size of 512 bits (pg. 1 section 2: Block Devices, where the sectors are 512 bytes).

19. Consider **claims 10 and 20**, as applied to **claims 1 and 11** above, Erdelsky discloses wherein the blocks (2, 3, 4) of predetermined size do not contain data concerning their state if they are completely busy or free and in that case related information is included in a greater block, with an integration level greater by one (pg. 1 section 2: Block Devices, pg. 3 section 5: Disk Partitions, section 7: Reserved Sectors and pg.'s 5-6 section 8: file allocation tables, where clusters are blocks of a predetermined size and they do not contain information about whether they are busy or free, the FAT table in the partition stores this information).

Conclusion

20. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

21. Chen et al. (US 6,233,105 B1) "Method of Disk Formatting"

22. Ruff et al. (US 6,088,778) "Method for Manipulating Disk Partitions"

23. Maeda et al. (US 6,611,907 B1) "Semiconductor Memory Card Access Apparatus, a Computer-Readable Recording Medium, an Initialization Method, and a Semiconductor Memory Card".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael Alsip whose telephone number is 571-270-1182. The examiner can normally be reached on Monday through Friday 7:30AM to 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matt Kim can be reached on 571-272-4182. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Art Unit 2186

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June 8, 2007

sjt 6/11/07


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